

calcareous layer that is characteristic of *Aspella* lends support to the assignment of this new species to *Favartia*. The nature of the radula, unfortunately, is not known.

## LITERATURE CITED

- Adams, C. B., 1850, Descriptions of supposed new species of marine shells which inhabit Jamaica. Contrib. to Conch. no. 4, pp. 56-68.
- Broderip, W. J. [and G. B. Sowerby, I.], 1833, Characters of new species of Mollusca and Conchifera, collected by Mr. Cuming. Proc. Comm. Sci. Corres. Zool. Soc. London, for 1832, pt. 2. pp.173-179.
- Carpenter, P. P., 1857, Report on the present state of our knowledge with regard to the Mollusca of the west coast of North America. Rept. Brit. Assoc. Adv. Sci., for 1856, pp. 159-368, pls. 6-9.
- Sowerby, G. B. II, 1879, Monograph of the genus *Murex*. Thes. Conch., 4:1-55, 24 pls.
- Sowerby, G. B., III, 1894, Descriptions of twelve new species, chiefly from Mauritius. Proc. Malac. Soc. London, 1:41-44, pl. 4.
- Tryon, G. W., Jr., 1880, Muricinae, Purpurinae, Man. Conch.; Philadelphia, 2:1-289, 70 pls.

#### FOUR NEW LAND SNAILS FROM THE SOUTHEASTERN UNITED STATES

BY LESLIE HUBRICHT

MESODON KALMIANUS, new species.

Pl. 2, figs. a-c.

Shell subglobose, spire elevated, conic, apex obtuse; tawny-olive, shining, translucent; umbilicate, the umbilicus nearly covered by the reflected peristome; whorls  $4\frac{1}{2}$  to 5, regularly increasing, well rounded, last whorl descending and constricted behind the aperture; embryonic whorl nearly smooth, succeeding whorls with rib-striae, last two whorls with incised spiral lines which are more prominent on the base; aperture roundly lunate, oblique, peristome reflected, white.

Penis long, slender, with a small fleshy body in the upper end, without pilasters; vagina very short; spermatheca oblong, about twice as long as wide, duct very slender, about half as long as the penis. Penis 7 mm., vagina 0.3 mm., spermatheca 1 mm., duct 3.5 mm.

Diameter 9.2 mm., height 6.2 mm., aperture width 4.4 mm., aperture height 4.4 mm., whorls 4.8. Holotype.

*Distribution*:—*Kentucky*: Laurel Co.: near Laurel River, Lily, holotype 135311 and paratypes 135312 Chicago Natural History

Museum, other paratypes 17922, collection of the author. *Tennessee*: Scott Co.: near creek, 0.5 mile north of Glenmary. Morgan Co.: roadside, 2.3 miles north-northeast of Sunbright.

*Mesodon kalmianus* is most closely related to *M. downieanus* (Bland). The shell is more strongly rib-striate, and when fresh is darker colored. The penis in *M. downieanus* is only half as long and much stouter with a large fleshy body in the upper end. *M. kalmianus* is found on low ground near streams, while *M. downieanus* is found on the summits of sandstone mountains.

#### EUCONULUS DENTATUS (Sterki)

*Euconulus chersinus dentatus* (Sterki), Pilsbry, 1946, Acad. Nat. Sci. Philadelphia, Monographs 3, 2: 242-243.

*Euconulus dentatus* is a winter snail, being found from January to April, while *E. chersinus* (Say) is found throughout the year but is rare during the winter. *E. dentatus* is found in dryer habitats than those in which *E. chersinus* is usually found. The shell is smaller and the revolving striae on the base are usually more distinct.

#### GLYPHYALINIA SPECUS, new species.

Pl. 2, figs. d-f.

Shell small, depressed; subhyaline, shining; umbilicate, the umbilicus occupying about 23% of the diameter of the shell; whorls  $4\frac{1}{2}$ , well rounded, regularly increasing; sculptured above with distinct close-set radial striae, weaker on the base; spire very low conoid, sutures moderately impressed, margined; aperture oblique, lunate, a little wider than high, somewhat flattened above, base well rounded, lip simple.

Diameter 4.8 mm., height 2.3 mm., aperture width 2.2 mm., aperture height 1.8 mm, umbilicus diameter 1.1 mm., whorls 4.5. Holotype.

*Distribution*: — *Kentucky*: Edmonson Co.: in White Cave, Mammoth Cave National Park. Barren Co.: in James Cave, 1.5 miles northwest of Park City; in Beckton Cave, 0.5 mile northwest of Beckton, holotype 135315 C.N.H.M., paratypes 17218, collection of the author. *Tennessee*: Jackson Co.: in Hargis Cave, 1 mile north of Granville (Thomas C. Barr, Jr. coll.). Van Buren Co.: in McElroy Cave, 1.5 miles northeast of Bone Cave P. O. Grundy Co.: in Crystal Cave, 0.5 mile north of Piedmont.

*Glyphyalinia specus* is most closely related to *G. lewisiana* (Clapp), differing principally in its larger size. The animal is white and apparently blind. It is known only from the total darkness of caves.

#### PARAVITREA LAPILLA, new species.

Pl. 2, figs. g-d.

Shell small, pale buff, subhyaline, shining; spire low, convex,

with shallow sutures; whorls 7, slowly increasing, last quarter whorl expanded in mature shells; periphery somewhat flattened in young shells, becoming rounded when mature, deflected downward in last quarter whorl; umbilicus deep, well-like, occupying about 20% of the diameter of the shell; aperture oblique, lunate, wider than high, somewhat flattened on the base and above, lip thin, simple; sculpture of irregularly spaced radial grooves and growth wrinkles, distinct above but becoming obsolete on the base; there are two or three pairs of teeth within the last whorl at all stages of growth. Animal white.

Diameter 4.8 mm., height 2.2 mm., umbilicus diameter 1.0 mm., 7 whorls. Holotype.

*Distribution*: — *Tennessee*: Davidson Co.: Stones River bluff, Todd Knob, Donelson, holotype 135313 and paratypes 135314 C.N.H.M., other paratypes 29589, collection of the author.

*Paravitrea lapilla* is most closely related to *P. metallacta* Hubricht and *P. tantilla* Hubricht. It is larger than both, it has teeth in the adult shell as in *P. tantilla*, but the last whorl expands somewhat like *P. metallacta*, although not as much. It is more depressed than *P. capsella* (Gould), and the animal is white rather than pale slate-colored.

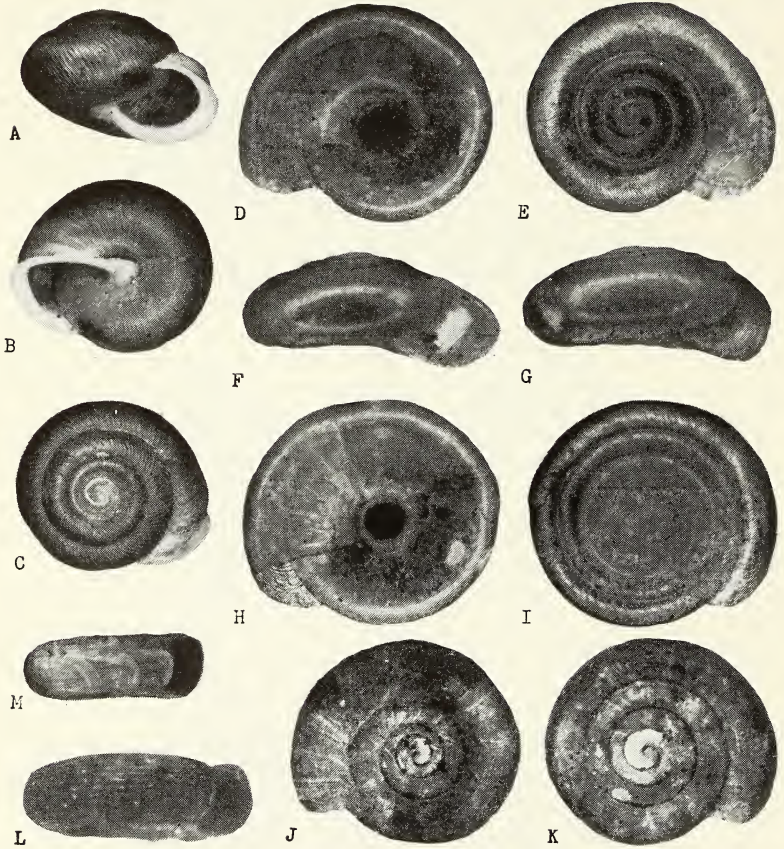
#### HELICODISCUS MULTIDENS Hubricht

This species was described from specimens collected in caves. It has since been found at the following two epigeal localities: *Tennessee*: Claiborne Co.: Indian Creek bluff, 0.5 mile above mouth. Smith Co.: wooded hillside, 1.5 miles southwest of Elmwood. A large series was collected at the last locality.

#### HELICODISCUS ENNEODON, new species.

Pl. 2, figs. j-m.

Shell small, discoidal, spire slightly concave; yellowish to brown, dull, opaque, whorls  $4\frac{1}{2}$ ; umbilicus wide and shallow, showing all the whorls, occupying about 50% of the diameter of the shell; whorls somewhat flattened above the periphery, slowly increasing, the last descending behind the aperture; sculptured with numerous, fine epidermal fringes on lirae; aperture lunate, the peristome simple, somewhat thickened within; within the last quarter whorl there are 9 teeth, 3 pairs of teeth on the outer and basal walls, and alternating with them, 3 teeth on the parietal wall; the teeth on the outer and basal walls are radially elongate, raised on a heavy callous ridge, and separated by a rounded sinus; the parietal teeth are about twice as broad as high, the ends are turned forward, the upper end more so than the lower; of the 3 sets of teeth the center set is usually more fully developed than the others; as the shell grows, the teeth farthest within are absorbed and a new set added near the aperture.



Holotypes. A-C. *Mesodon kalmianus* Hubricht. D-F. *Glyphyalinia specus* Hubricht. G-I. *Paravitrea lapilla* Hubricht. J-L. *Helicodiscus enneodon* Hubricht. M. Paratype opened to show 3 parietal teeth. Photographs by Chicago Natural History Museum.